

December 4, 1981

Memo to File:

RE: Chevron Resources'
Phosphate Operation
ACT/047/007
Uintah County, Utah

On December 1 and 2, 1981, Deputy Director Ron Daniels, Coordinator of Mined Land Development Jim Smith and Field Supervisor Joe Helfrich, conducted an on-site inspection of Chevron Resources' phosphate operation near Vernal, Utah. Division members met with Fred Riding, plant manager, Howard Applanap, mining superintendent and Dick Haddenham. The inspection resulted from concerns generated by the Division of Wildlife Resources and public citizens. These concerns encompassed reclamation procedures, topsoil stockpiling and sediment loading in Brush Creek.

General Comments

Access to the phosphate operation can be gained by traveling north from Vernal approximately 10 miles on U. S. Route 40. Representative quadrangle maps depicting the general topography of the area include Burnt Cabin Gorge, Donkey Flat, Dyer Mountain and Steinaker Reservoir.

Present activities are located along the ridges of Cottonwood Canyon, Hole-in-the-Wall Canyon and Big Brush Gorge. Previous activities are located in Camp Canyon and portions thereof between Camp Canyon and Big Brush Gorge. The phosphate is presently mined by contour stripping methods employing shovel and bucket removal of the ore. Future mining techniques will entail the use of a dragline in areas of high overburden. Use of the dragline system will also facilitate more expedient reclamation efforts.

Permits

Approval to commence mining operations was granted to Stauffer Chemical Company on September 5, 1980, by the Division of Oil, Gas and Mining. On February 23, 1981, the Division received notification from Mr. J. G. Turner, attorney in the fact for Chevron Resources Company, that the transfer of assets to Chevron USA by the Stauffer Chemical Company would take place on February 27, 1981. Mr. Al W. Jarvis of Stauffer Chemical Company notified the Division on March 1, 1981, of the final transfer of ownership from Stauffer Chemical Company to Chevron Resources Company. For the most part, Chevron Resources Company maintained the old Stauffer Chemical Company staff. Although management remained the same at the phosphate mine, mining techniques and expansion were altered to some extent and are still being altered at present. The changes in mining techniques and increased production are

presently being prepared by the Morrison-Knudson Consulting Firm. Mr. Riding indicated that alterations in the existing reclamation plan were also being addressed and would be available to the Division sometime during the first quarter of 1982. Division members felt that the sediment loading in Brush Creek and inadequate topsoil stockpiling should be addressed prior to the receipt of the updated Mining and Reclamation Plan. Finally, should Chevron Resources Company desire to use the existing air field previously used by Stauffer Chemical Company, an easement or right-of-way should be obtained from the Bureau of Land Management. Should Chevron Resources desire not to use the existing portion of the air strip located on BLM ground, it would be to Chevron's advantage to contact the Bureau of Land Management concerning reclamation of said portions of the existing air strip. ←

Topsoil

Pursuant to MR Form 2, Section 11(a)(2), very little evidence of topsoil stockpiling was noted throughout the entire operation. A small amount of topsoil had been stockpiled in a relatively flat area between Camp Canyon and Big Brush Gorge. Visual observations indicated that topsoil occurred in varying depths from 0 to 20 inches throughout the minesite. Other than the one small existing topsoil pile, disregard for topsoil stockpiling was noted throughout the minesite. Topsoil had been removed and deposited into the bottom of Camp Canyon, Big Brush Gorge, Hole-in-the-Wall Canyon and Cottonwood Canyon. The topsoil material had then been covered by existing overburden. ← This activity is in violation of Rule M-10-14 of the 1977 Mined Land Reclamation Act for which the operator did not request a variance in his original Mining and Reclamation Plan, nor were any soil analyses taken to determine proper revegetation techniques.

Hydrology

Big Brush Creek is the only perennial drainage that flows through the permit area. Other alleged intermittent or ephemeral drainages contained within the permit area include: Hole-in-the-Wall Canyon; Cottonwood Canyon; and Camp Canyon. A large portion of Camp Canyon has been filled in approximately three years ago with no evidence of reclamation to date. At the confluence Hole-in-the-Wall and Cottonwood Canyon a pad has been constructed by filling in both of these canyons to facilitate a sag mill grinding operation that will include a slurry line. Although the mining of the phosphate ore was properly depicted on Map 31-200A in the original Mining and Reclamation Plan, the installation of the sag mill grinding operation has not been addressed. Staff members should be concerned with topsoil removal, hydrology, reclamation, bonding and disposal of waste material, at a minimum. ← With the exception of the culverted section of Brush Creek to facilitate access to the sag mill operation. The other existing ephemeral or intermittent drainages have not been culverted as requested in a variance by the operator. However, this variance was granted without any supportive data to determine the effects on hydrologic balance above the permit area and below the permit area. Mr. Daniel's advised Mr. Riding that it would be to his benefit to monitor Brush Creek above and below the permit area enabling him to provide the public with supportive data demonstrating that the environmental integrity of Brush Creek is being maintained. ← Drainage?

Spoil

Spotty attempts have been made to reclaim spoil piles located northeast of Camp Canyon. Remaining spoil has been deposited in the bottom of the existing ephemeral drainages. No toxicity tests of spoil generated during the mining operation are included in the existing Mining and Reclamation Plan. ←

Backfilling and Grading

Backfilling and grading has been evident along the northeast portion of Camp Canyon extending towards the upper perimeter of Big Brush Gorge. Mr. Applanap indicated that the mined out portion of Camp Canyon had been completed approximately three years ago. There was no evidence of topsoil stockpiling, backfilling to the highwall or reclamation efforts in this area. Mr. Riding indicated that no mining would take place in this area for approximately the next 15 years. Reclamation efforts should be attempted in this area as soon as possible.

Revegetation

As previously mentioned, portions of the disturbed area between Camp Canyon and Big Brush Gorge have been reclaimed within the last five years, some within the last month and some have been established as test plot areas by the SCS, Division of Wildlife Resources and the U. S. Forest Service. Since the Division's inspection during the first week of October 1981, considerable efforts have been made to reclaim additional areas located between Camp Canyon, Big Brush Gorge and a borrow area adjacent to the culverted landfill across Big Brush Gorge.

Roads

The network of existing roads provides access to the slurry ponds, Camp Canyon and associated areas between Camp Canyon and Big Brush Gorge. Access from the office area to the confluence of Cottonwood Canyon and Hole-in-the-wall Canyon was developed by filling in large portions of both Cottonwood and Hole-in-the-Wall canyons.

Other Transportation Facilities

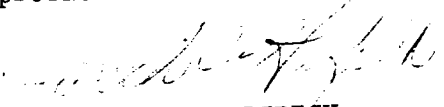
Chevron Resources Company has proposed a slurry line that will extend from the sag mill operation located at the confluence of Hole-in-the-Wall, Cottonwood canyons to the existing surface facilities located between Camp Canyon and the existing landing strip. ←

Summary

As Chevron Resources Company will not be providing the Division with an updated Mining and Reclamation Plan until sometime during the first quarter of 1982, Division staff members should perform an expeditious review of the operator's existing Mining and Reclamation Plan. Concentrating on topsoil ←

MEMO TO FILE
ACT/047/007
December 4, 1981
Page 4

stockpiling, hydrology and revegetation efforts. During the final meeting with Mr. Riding, Division members requested that a buffer zone be established along the upper perimeter of Big Brush Gorge so as to prevent any additional sediment loading from the stripping operation. This would also provide for proper topsoil stockpiling. This request and any additional recommendations brought about during an in-depth critique of the operator's existing mine plan should be prepared in written form as soon as possible and sent to the operator. Wildlife Resources should also be contacted so as to insure their concerns are also met to alleviate any future problems between Natural Resource divisions. ←


JOSEPH C. HELFRICH
FIELD SUPERVISOR

JCH/btb

Statistics:

Vehicle: #EX 70237

Miles: 324

Per Diem: 3 persons X 1 day, 6.5 hours @ \$37.50/day = \$124.64